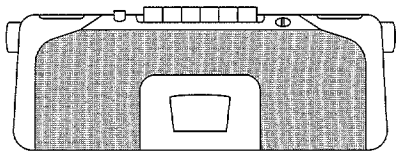
aiwa

aiwa SERVICE

CS-P88

SERVICE MANUAL



STEREO RADIO
CASSETTE RECEIVER

• BASIC TAPE MECHANISM : TN-21ZV-1805

• TYPE: HE, HR, EZ

REVISION PUBLISHING

• This Service Manual is the "Revision Publishing" and replaces "Simple Manual" CS-P88 (HE, HR, EZ), (S/M Code No. 09-993-410-0T1).

S/M Code No. 09-996-410-0R1

SPECIFICATIONS

Tuner section

Frequency range

FM :	87.5 MHz - 108 MHz Antenna : Rod antenna
MW :	530 kHz - 1,605 kHz Antenna : Ferrite bar antenna
LW<EZ> :	150 - 285 kHz Antenna : Ferrite bar antenna
SW<HE,HR> :	5.9 - 18.0MHz Antenna : Rod antenna

Deck section

Track format	4 tracks, 2 channels
Frequency range	Normal tape : 50 Hz–12,500 Hz (EIAJ)
Recording system	AC bias
Erasing system	Magnet erase
Heads	Recording/Playback head x 1/ erasure head x 1

General

Speaker	77 mm cone type (2)
Output	Headphones jack (stereo mini-jack)
Power output	1.2W + 1.2 W (EIAJ 4 ohms, T.H.D. 10%) 0.9 W + 0.9 W (DIN 1% Rated Power) EZ : 2.2 W + 2.2 W (DIN MUSIC POWER)
Power requirements	DC 6 V using four R14 (size C) batteries, HE, HR : AC 110 -120V / 220-240V switchable, 50/60 Hz EZ : AC 230 V, 50 Hz
Power consumption	10 W
Dimensions (W x H x D)	368 (W) x 134.5 (H) x 106 (D) mm
Weight	1.8 kg (excluding batteries)

• Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CS5-908-010		IB,EZ(9L)<EZ[S],EZ[L]>
1	8Z-CS5-907-010		IB,H(ECA)<HE,HR>
⚠ 2	87-A80-081-010		AC CORD SET ASSY,EZ BLK
⚠ 3	87-A90-312-010		PLUG,CONVERSION WTN-1157R1<HE,EZ[S]>

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

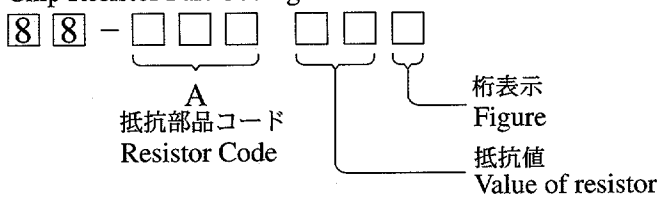
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A20-955-010		IC,LA1828
	87-A20-946-040		C-IC,MM1434XF
	88-CS7-612-010		IC,TA7417AP
	8Z-CSA-617-010		IC,LA4550
TRANSISTOR			
	89-319-233-080		TR,2SC1923 (0.1W)
	87-026-219-080		TR,DTA144ES
	87-026-215-080		TR,DTC114YS
	89-109-521-080		TR,2SA952 (0.6W)
	89-327-125-080		C-TR,2SC2712 GR
	87-026-228-080		C-TR,DTA124EK
	89-318-154-080		TR,2SC1815 (0.4W)
	87-026-447-080		TR,2SC1740S R
	87-026-216-080		TR,DTA124ES
	87-A30-167-010		TR,2SB1566E
	87-026-245-080		TR,DTC114ES
	89-112-965-080		TR,2SA1296 (0.75W)
	87-026-463-080		TR,2SA933S (0.3W)
	87-026-217-080		TR,DTC124ES
	S2-KTD-130-4A0		TR,KTD1304
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-070-345-080		DIODE,IN4148
	87-A40-437-080		ZENER,MTZJ4.3B
	87-A40-465-010		DIODE,FR202
MAIN C.B			
C1	87-010-314-080		C-CAP,S 22P-50V
C2	87-010-316-080		C-CAP,S 33P-50 CH
C3	87-010-314-080		C-CAP,S 22P-50V
C6	87-010-378-080		CAP, ELECT 10-16V
C7	87-010-194-080		CAP, CHIP 0.047
C8	87-010-190-080		C-CAP,S 0.01-50
C9	87-010-311-080		CAP 12P<EXCEPT HR>
C10	87-010-190-080		CAP, CHIP 0.01-50
C12	87-010-314-080		C-CAP,S 22P-50V
C14	87-010-400-080		CAP, ELECT 0.47-50V
C15	87-010-190-080		CAP, CHIP 0.01-50
C16	87-010-178-080		CHIP CAP 1000P
C17	87-012-368-080		CHIP CAPACITOR,0.1-50
C18	87-010-198-080		CAP, CHIP 0.022
C19	87-010-544-080		CAP, ELECT 0.1-50V
C20	87-010-400-080		CAP, ELECT 0.47-50V
C21	87-010-403-080		CAP, ELECT 3.3-50V
C22	87-010-190-080		CAP, CHIP 0.01-50
C24	87-010-190-080		CAP, CHIP 0.01-50
C25	87-010-190-080		CAP, CHIP 0.01-50
C26	87-010-545-080		CAP, ELECT 0.22-50V
C27	87-010-545-080		CAP, ELECT 0.22-50V
C28	87-010-194-080		CAP, CHIP 0.047
C29	87-010-194-080		CAP, CHIP 0.047
C30	87-010-248-080		CAP, ELECT 220-10V
C31	87-010-379-080		CAP, ELECT 22-16V
C32	87-010-190-080		CAP, CHIP 0.01-50
C33	87-010-190-080		CAP, CHIP 0.01-50
C34	87-010-190-080		CAP, CHIP 0.01-50
C35	87-010-314-080		C-CAP,S 22P-50V<HE,HR>
C37	87-012-155-080		C-CAP 180P-50CH
C38	87-010-318-080		C-CAP,S 47P-50 CH
C41	87-010-318-080		C-CAP,S 47P-50 CH<EZ[S],EZ[L]>
C44	87-012-145-080		C-CAP 270P-50CH<HE,HR>
C44	87-012-156-080		C-CAP,S 220P-50 CH<EZ[S],EZ[L]>
C45	87-010-181-080		CHIP CAP 1800P-50<HE,HR>
C92	87-010-178-080		CHIP CAP 1000P
C93	87-010-190-080		C-CAP,S 0.01-50<EZ[S],EZ[L]>
C94	87-018-109-080		CAP,CER 22P-50<EZ[S],EZ[L]>
C201	87-010-404-040		CAP,E 4.7-50
C202	87-010-375-080		CAP,E 330-10 SME
C203	87-010-404-040		CAP,E 4.7-50
C204	87-010-178-080		CHIP CAP 1000P
C205	87-010-553-080		CAP,E 47-16
C207	87-010-190-080		CAP, CHIP 0.01-50
C208	87-010-190-080		CAP, CHIP 0.01-50
C209	87-010-190-080		CAP, CHIP 0.01-50
C210	87-010-190-080		CAP, CHIP 0.01-50
C211	87-010-404-040		CAP,E 4.7-50
C212	87-010-404-040		CAP,E 4.7-50
C213	87-010-553-080		CAP,E 47-16
C214	87-010-404-040		CAP,E 4.7-50
C215	87-010-402-040		CAP,E 2.2-50
C251	87-010-404-040		CAP,E 4.7-50
C253	87-010-404-040		CAP,E 4.7-50
C262	87-010-404-040		CAP,E 4.7-50
C301	87-010-180-080		C-CER 1500P
C302	87-010-178-080		CHIP CAP 1000P
C303	87-010-180-080		C-CER 1500P
C304	87-010-379-080		CAP,E 22-16
C305	87-010-194-080		CAP, CHIP 0.047
C306	87-010-404-080		CAP,E 4.7-50
C307	87-010-404-080		CAP,E 4.7-50
C308	87-010-379-080		CAP,E 22-16
C309	87-010-264-080		CAP,E 100-10 5L
C310	87-A10-176-010		CAP,CER 1000P-50<HE,HR>
C312	87-012-157-080		C-CAP,S 330P-50 CH<HE,HR>
C314	87-010-221-080		CAP, ELECT 470-10V
C317	87-010-248-080		CAP, ELECT 220-10V
C318	87-010-112-080		CAP, ELECT 100-16
C319	87-012-368-080		CHIP CAPACITOR,0.1-50
C320	87-010-185-080		C-CAP,S 3900P-50 B
C321	87-010-404-080		CAP,E 4.7-50
C322	87-010-375-080		CAP,E 330-10
C324	87-010-264-080		CAP,E 100-10 5L
C325	87-010-553-080		CAP,E 47-16
C326	87-010-184-080		C-CAP,S 3300P-50
C328	87-010-101-080		CAP,E 220-16
C329	87-010-322-080		C-CAP,S 100P-50 CH
C330	87-010-264-080		CAP,E 100-10 5L
C351	87-010-180-080		C-CER 1500P
C352	87-010-178-080		CHIP CAP 1000P
C353	87-010-180-080		C-CER 1500P
C354	87-010-379-080		CAP,E 22-16
C355	87-010-194-080		CAP, CHIP 0.047
C356	87-010-404-080		CAP,E 4.7-50
C357	87-010-404-080		CAP,E 4.7-50
C401	87-010-404-040		CAP,E 4.7-50
C402	87-010-404-040		CAP,E 4.7-50
C403	87-010-178-080		CHIP CAP 1000P
C404	87-010-112-080		CAP,E 100-16
C405	87-010-112-080		CAP,E 100-16
C407	87-010-221-080		CAP, ELECT 470-10V
C408	87-010-379-080		CAP,E 22-16
C409	87-010-379-080		CAP,E 22-16
C410	87-010-112-080		CAP,E 100-16
C411	87-010-235-080		CAP,E 470-16
C412	87-010-112-080		CAP,E 100-16
C451	87-010-404-040		CAP,E 4.7-50
C452	87-010-404-040		CAP,E 4.7-50
C453	87-010-178-080		CHIP CAP 1000P
C454	87-010-112-080		CAP,E 100-16
C455	87-010-112-080		CAP,E 100-16
C457	87-010-221-080		CAP, ELECT 470-10V
C602	87-010-236-080		CAP,E 1000-10 SME
C603	87-010-221-080		CAP, ELECT 470-10V
C605	87-010-101-080		CAP, ELECT 220-16

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C606	87-015-997-090		CAP,E 2200-16 SME
CF1	87-A90-128-010		FLTR,AM IF CFAL-455
CF2	S2-9SF-E10-7P0		FM,CER FLTR 10.7MHZ
CF3	S2-9SF-E10-7P0		FM,CER FLTR 10.7MHZ
CN301	S1-2S6-003-700		CONN,6P
CN303	8Z-CS5-621-010		CONN,2P 53014-0210
CN602	8Z-CS5-629-010		CONN,4P 53014 MOLEX(2),MOTOR
CN603	8Z-CS5-622-010		CONN,2P 5268-02A
D3	87-A40-226-080		VARI-CAP,SVC251SPA
L2	S7-A01-031-000		FM OSC COIL 5.5X2.5T<EZ[S],EZ[L]>
L2	87-A50-347-010		COIL,FM BPF EX<HE,HR>
L3	87-A50-348-010		COIL,BAR ANT LW/MW<EZ[S],EZ[L]>
L3	87-A50-448-010		COIL,BAR ANT MW HE(COI)<HE,HR>
L4	87-A50-345-010		COIL,FM RF EX
L5	87-A50-343-010		COIL,FM OSC EX<HE,HR>
L5	S7-A01-301-000		FM OSC COIL 7X3.5<EZ[S],EZ[L]>
L7	87-A50-336-010		COIL,AM IFT (TOKO)
L8	87-A50-335-010		COIL,FM IFT (TOKO)
L9	87-A50-334-010		COIL,FM DET (TOKO)
L10	87-003-102-080		COIL, 10UH
L11	87-A50-341-010		COIL,SW ANT (TOKO)<HE,HR>
L16	87-A50-463-010		MW OSC COIL<HE,HR>
L16	87-A50-339-010		COIL,LW OSC (TOKO)<EZ[S],EZ[L]>
L17	87-A50-340-010		COIL,SW OSC (TOKO)<HE,HR>
L17	87-A50-337-010		MW OSC COIL<EZ[S],EZ[L]>

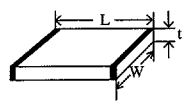
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L41	87-003-143-080		COIL 4.7 UH<HE,HR>
L301	87-007-342-010		COIL,OSC BIAS 85K
LED601	87-A40-622-010		L-34 HDSL
S1	8Z-CS5-606-010		SW,SL SK43D06(4P3T)
S201	8Z-CS5-609-010		SW,PUSH PS12E03(1P2T)
S301	8Z-CS5-607-010		SW,SL SK42D01(4P2T)
S302	S8-035-310-000		SW,SL 2P3T
TC4	87-011-220-080		TRIMMER CAP 20P VTC<HE,HR>
TC5	87-011-221-080		CAP, TRIMMER 30P<EZ[S],EZ[L]>
TC5	87-011-220-080		TRIMMER CAP 20P VTC<HE,HR>
TC6	87-011-221-080		CAP, TRIMMER 30P<EZ[S],EZ[L]>
VC1	87-A91-318-010		TUN-CAP,20P-140P E<EZ[S],EZ[L]>
VC1	87-A91-317-010		TUN-CAP,20P-335P H(TWD)<HE,HR>
VR401	8Z-CS5-617-010		VR,RTRY 50K*2 V RK14K12A
HEADPHONE C.B			
CN402	8Z-CSA-607-010		CONN,4P 53014-0410
CN403	8Z-CSA-607-010		CONN,4P 53014-0410
J401	87-009-216-010		JACK, DIA 3.5

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

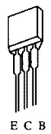


チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

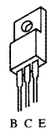
TRANSISTOR ILLUSTRATION

2SC1815
2SA1296



2SC1740
DTA124ES
DTC114YS
DTA144ES
DTC114ES
DTC124ES
2SA933S

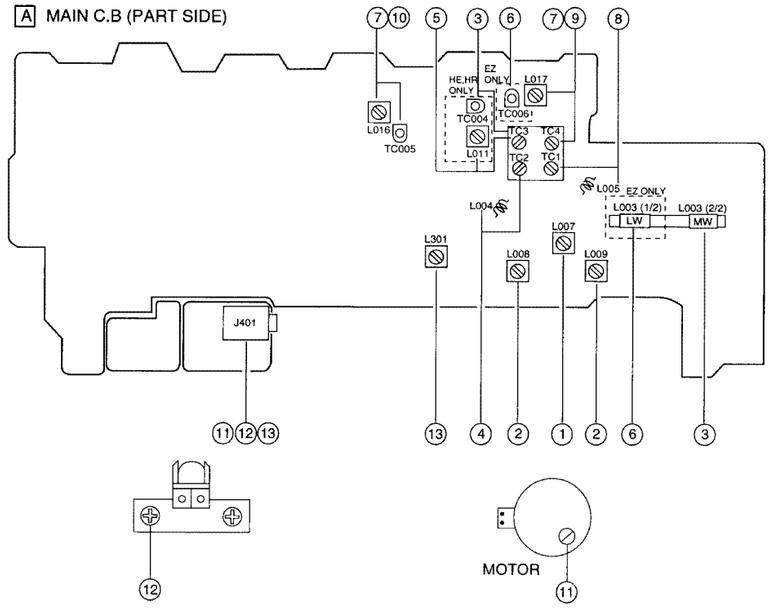
2SC1923
2SA952



2SB1566

2SC2712GR
DTA124EK

ELECTRICAL ADJUSTMENT



< RADIO SECTION >

1. AM IF Adjustment
   L007 ..... 455kHz

2. FM IF Adjustment
   L008, L009 ..... 10.7MHz

3a. MW Tracking Adjustment <HE, HR>
   L003 (2/2) 600kHz
   TC004 ..... 1400kHz

3b. MW Tracking Adjustment <EZ>
   L003 (2/2) 600kHz
   TC3 ..... 1400kHz

4. FM Tracking Adjustment
   L004 ..... 88MHz
   TC2 ..... 108MHz

5. SW Tracking Adjustment <HE, HR>
   L011 ..... 5.9MHz
   TC3 ..... 18MHz

6. LW Tracking Adjustment <EZ>
   L003 (1/2) 150kHz
   TC006 ..... 280kHz

7a. MW Frequency Range Adjustment <HE, HR>
   L016 ..... 515kHz
   TC005 ..... 1635kHz

7b. MW Frequency Range Adjustment <EZ>
   L017 ..... 515kHz
   TC4 ..... 1635kHz

8. FM Frequency Range Adjustment
   L005 ..... 87.35MHz <EZ> / 87MHz<HE, HR>
   TC1 ..... 108.3MHz <EZ> / 109MHz <HE, HR>

9. SW Frequency Range Adjustment <HE, HR>
   L017 ..... 5.8MHz
   TC4 ..... 18.5MHz

10. LW Frequency Range Adjustment <EZ>
   L016 ..... 145kHz
   TC005 ..... 295kHz

< TAPE RECORDER SECTION >

11. Tape speed Adjustment
   Condition: • Test tape: TTA-100
   • Test point: PHONES JACK (J401)
   • Adjustment location: SFR of deck motor
   Method: Play back the test tape and adjust so that the output frequency is 3000Hz.

12. Azimuth Adjustment
   Condition: • Test tape: TTA-320
   • Test point: PHONES JACK (J401)
   • Adjustment location: Azimuth adjustment screw
   Method: Play back the test tape and adjust so that the output is maximum.

13. AC Bias Adjustment
   Condition: • Test tape: TTA-630
   • Test point: PHONES JACK (J401)
   • Adjustment location: L301
   Method: Set up the recording mode. Adjust L301 so that the test point becomes 75kHz.

PRACTICAL SERVICE FIGURE

< RADIO SECTION >

<FM Section>

Sensitivity: (IHF, THD 3%)	Less than 20dB [at 87.5 / 98 / 108MHz]
S/N Ratio:	More than 55dB [at 98MHz]
Distortion (Input 54dB):	Less than 1.5% [at 98MHz]
Distortion (Input 120dB):	Less than 5.0% [at 98MHz]
FM stereo separation: (Input 1kHz)	More than 18dB [at 98MHz]
Intermediate frequency:	10.7MHz ± 0.1MHz

<AM(MW) Section>

Sensitivity (S/N 10dB):	Less than 45dB [at 600 / 1000 / 1400kHz]
S/N Ratio:	More than 35dB [at 1000kHz]
Distortion (Input 74dB):	Less than 1.5% [at 1000kHz]
Distortion (Input 120dB):	Less than 3.0% [at 1000kHz]
Intermediate frequency:	455kHz ± 3.5kHz

<LW Section><EZ only>

Sensitivity (S/N 10dB):	Less than 55dB [at 150 / 200 / 285 kHz]
Distortion (Input 74dB):	Less than 3.0% [at 200kHz]
Distortion (Input 120dB):	Less than 3.5% [at 200kHz]
Intermediate frequency:	455kHz ± 3.5kHz

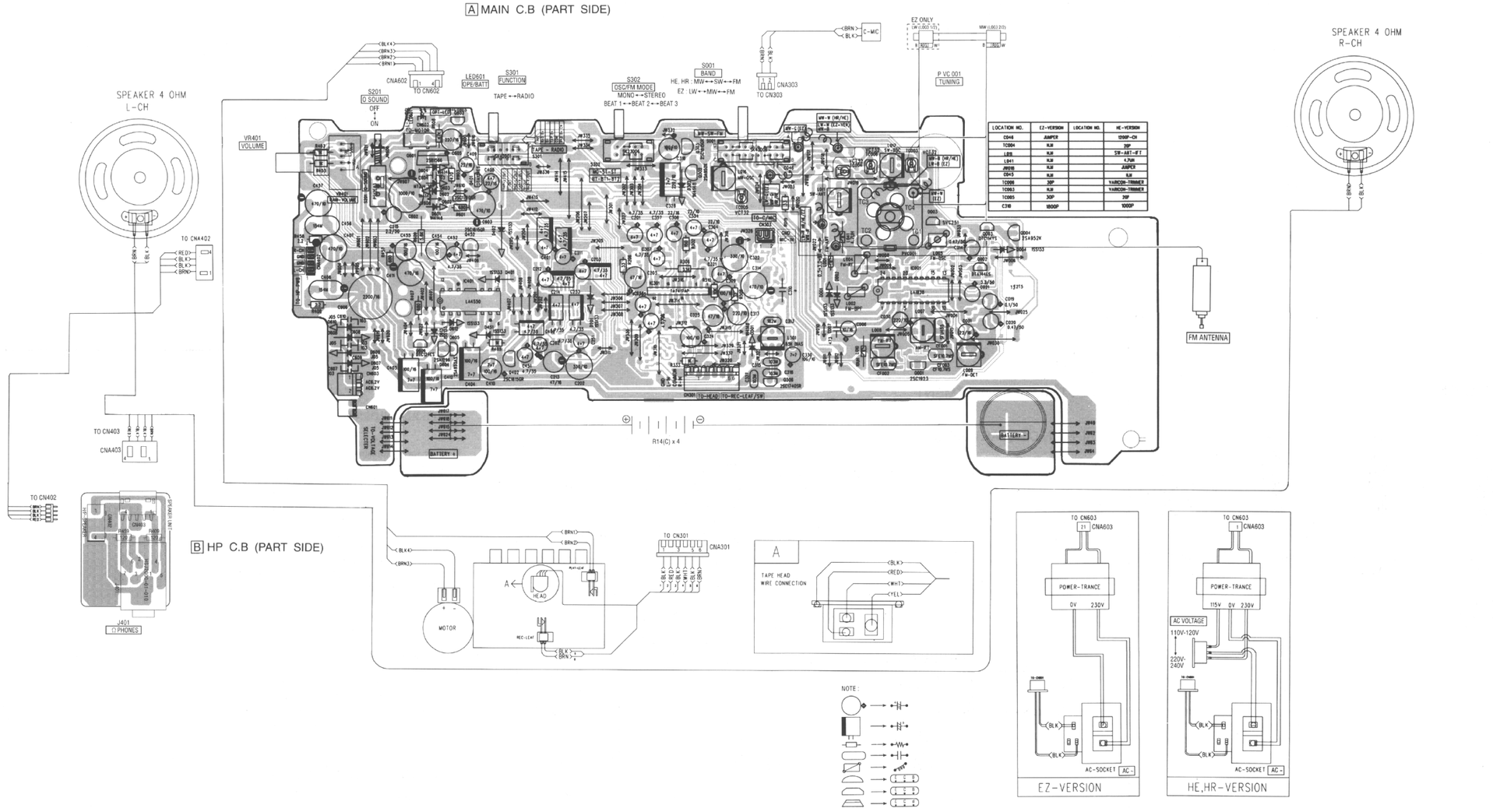
<SW Section><HE, HR only>

Sensitivity (S/N 10dB):	43dB ± 5dB [at 5.9MHz]
	47dB ± 5dB [at 12.0MHz]
	45dB ± 5dB [at 18.0MHz]
S/N Ratio (Input 54dB):	More than 20dB [at 12.0MHz]
Intermediate frequency:	10.7MHz

< TAPE RECORDER SECTION >

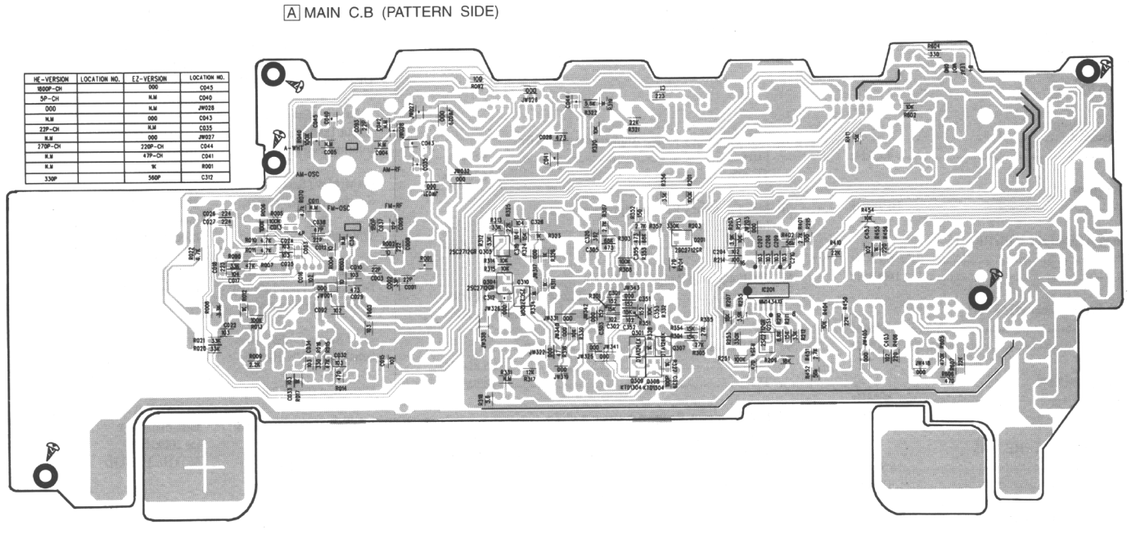
PB output level:	More than 0.9W (DC, AC)
Distortion:	Less than 3%(PB, DC)
	Less than 5%(REC/PB, AC)
S/N ratio:	More than 40dB (PB, DC, AC)
	More than 25dB (REC/PB, AC, DC)
Erasing ratio:	More than 50dB
Noise level:	Less than 25mV (DC, AC, PB, VOL MAX)
	Less than 1.0mV (DC, AC, PB, VOL MIN)
Test tape:	TTA-100
	NORMAL TTA-601
	TTA-210

A MAIN C.B (PART SIDE)



LOCATION NO.	EZ-VERSION	LOCATION NO.	HE-VERSION
C046	JUMPER		1200P-CH
TC004	N.M		20P
L05	N.M		SW-ANT-HFT
L041	N.M		4.7uH
JW035	N.M		JUMPER
C043	N.M		N.M
TC005	20P		VARICON-TRIMMER
TC003	N.M		VARICON-TRIMMER
TC065	20P		20P
C318	1000P		1000P

A MAIN C.B (PATTERN SIDE)



HE-VERSION	LOCATION NO.	EZ-VERSION	LOCATION NO.
1000P-CH		000	C045
5P-CH		N.M	C040
000		N.M	JW028
N.M		000	C043
22P-CH		N.M	C035
N.M		000	JW027
270P-CH		220P-CH	C044
R.B		470-CH	C041
R.B		1K	R001
330P		560P	C012

SCHEMATIC DIAGRAM – 1 (MAIN : HE, HR)

PIN	Q001			Q002			Q003			Q004			Q601		Q602		Q603		Q308	
	FM	MW. LW	SW	FM	MW. LW	SW	FM	MW. LW	SW	FM	MW. LW	SW	TUNER	TAPE	TUNER	TAPE	TUNER	TAPE	REC	PLAY
E	1.5V	1.6V	1.6V	0V	0V	0V	0V	0V	0V	2.9V	3.6V	3.7	7.7V	6.6V	3.7V	3.6V	1.9V	1.8V	-3.2V	2.3V
C	3.0V	3.1V	3.1V	1.9V	1.7V	1.7V	0V	0V	0V	3.5V	1.0V	1.0V	4.4V	4.2V	7.0V	6.0V	3.4V	3.3V	2.0V	2.3V
B	2.2V	2.3V	2.3V	0V	0V	0V	3.5V	3.3V	3.6V	3.5V	3.3V	3.6V	7.0V	6.0V	4.3V	4.2V	0V	0V	-16V	3.0V

PIN	Q301		Q302	Q306		Q307		Q309		Q402	Q452	Q401
	PLAY	REC		PLAY	REC	PLAY	REC	PLAY	REC			
E	4.2V	-3.3V	3.6V	0V	0V	4.2V	4.3V	2.3V	-3.3V	0V	0V	7.4V
C	4.2V	2.0V	4.3V	0V	3.5V	4.2V	4.2V	2.3V	2.0V	0V	0V	6.0V
B	0.3	-6.3V	4.3V	0.7V	-0.2V	0.3V	4.3V	3.0V	-6.3V	0.1V	0.1V	6.0V

PIN	Q201	Q251	Q604	Q605	Q606	Q304		Q305		Q306
						PLAY	REC	PLAY	REC	
E	0.8V	0.8V	6.7V	6.0V	0V	0V	0V	0V	0V	0V
C	1.5V	1.5V	6.0V	6.0V	0V	11.3V	11V	10V	11V	0.3V
B	0.2V	0.2V	5.4V	5.4V	6.0V	0V	-0.7V	-0.7V	0V	0V

SCHEMATIC DIAGRAM – 2 (MAIN : EZ)

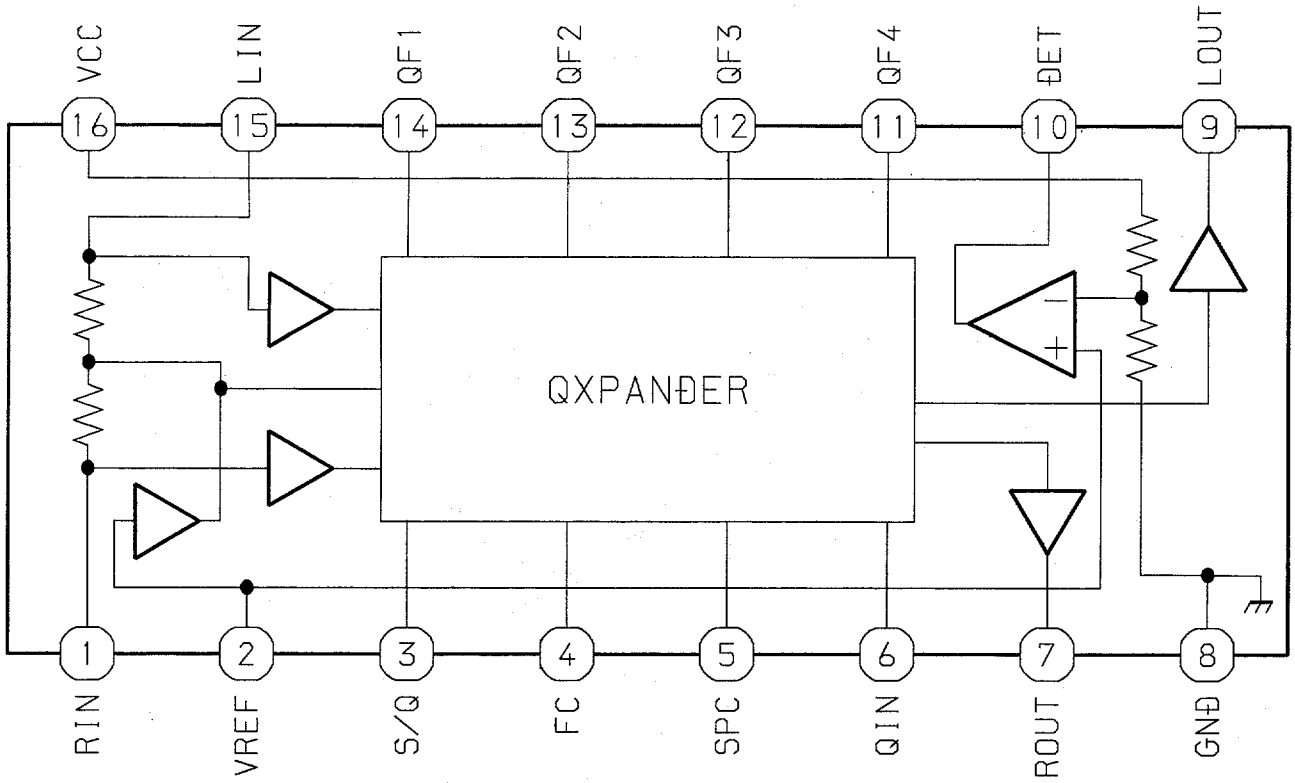
PIN	Q001			Q002			Q003			Q004			Q601		Q602		Q603		Q308	
	FM	MW. LW	SW	FM	MW. LW	SW	FM	MW. LW	SW	FM	MW. LW	SW	TUNER	TAPE	TUNER	TAPE	TUNER	TAPE	REC	PLAY
E	1.5V	1.6V	1.6V	0V	0V	0V	0V	0V	0V	2.9V	3.6V	3.7	7.7V	6.6V	3.7V	3.6V	1.9V	1.8V	-3.2V	2.3V
C	3.0V	3.1V	3.1V	1.9V	1.7V	1.7V	0V	0V	0V	3.5V	1.0V	1.0V	4.4V	4.2V	7.0V	6.0V	3.4V	3.3V	2.0V	2.3V
B	2.2V	2.3V	2.3V	0V	0V	0V	3.5V	3.3V	3.6V	3.5V	3.3V	3.6V	7.0V	6.0V	4.3V	4.2V	0V	0V	-16V	3.0V

PIN	Q301		Q302	Q306		Q307		Q309		Q402	Q452	Q401	
	PLAY	REC		PLAY	REC	PLAY	REC	PLAY	REC				
E	4.2V	-3.3V	3.6V	0V	0V	4.2V	4.3V	2.3V	-3.3V	0V	0V	7.4V	
C	4.2V	2.0V	4.3V	0V	3.5V	4.2V	4.2V	2.3V	2.0V	0V	0V	6.0V	
B	0.3	-6.3V	4.3V	0.7V	-0.2V	0.3V	4.3V	3.0V	-6.3V	0.1V	0.1V	6.0V	

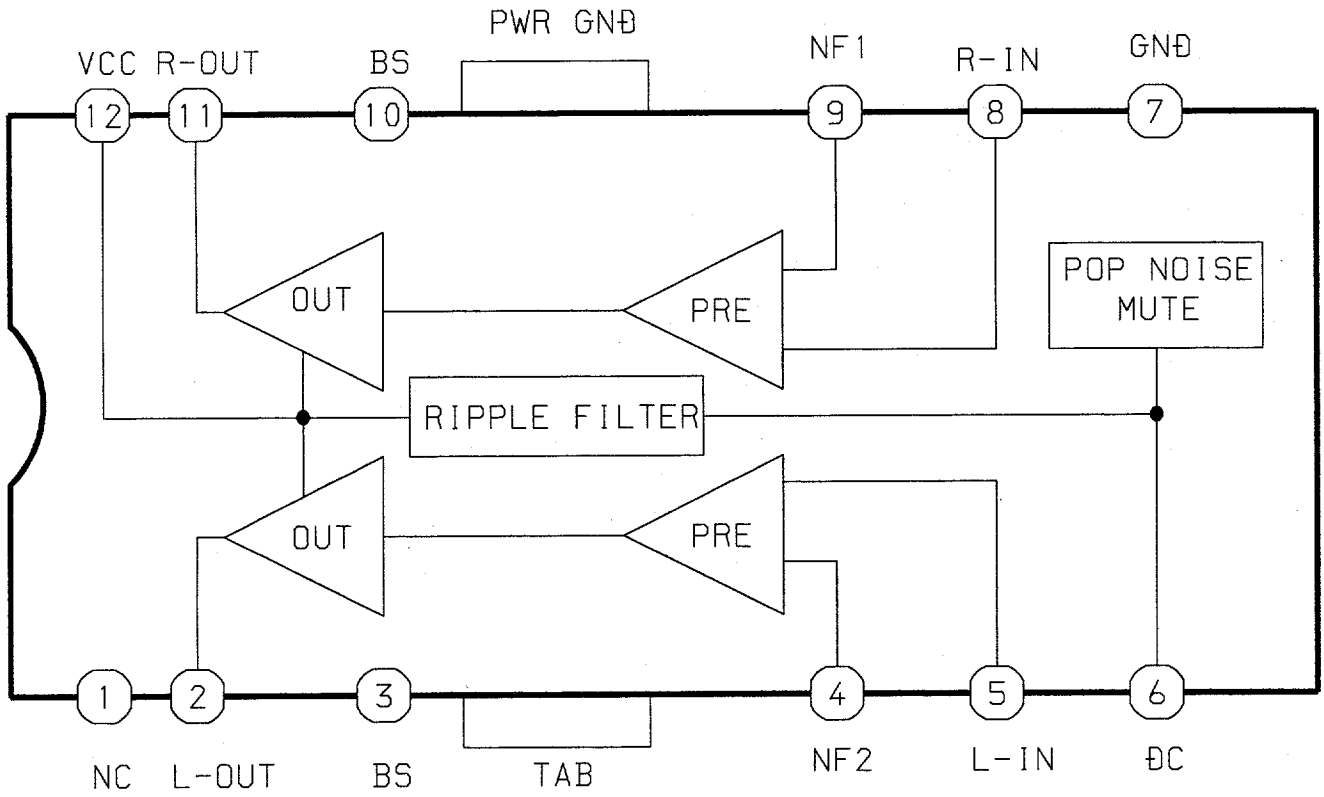
PIN	Q201	Q251	Q604	Q605	Q606	Q304		Q305	Q306
						PLAY	REC		
E	0.8V	0.8V	6.7V	6.0V	0V	0V	0V	0V	0V
C	1.5V	1.5V	6.0V	6.0V	0V	11.3V	11V	10V	11V	0.3V
B	0.2V	0.2V	5.4V	5.4V	6.0V	0V	-0.7V	-0.7V	0V	0V

IC BLOCK DIAGRAM

IC, MM1434XF



IC, LA4550



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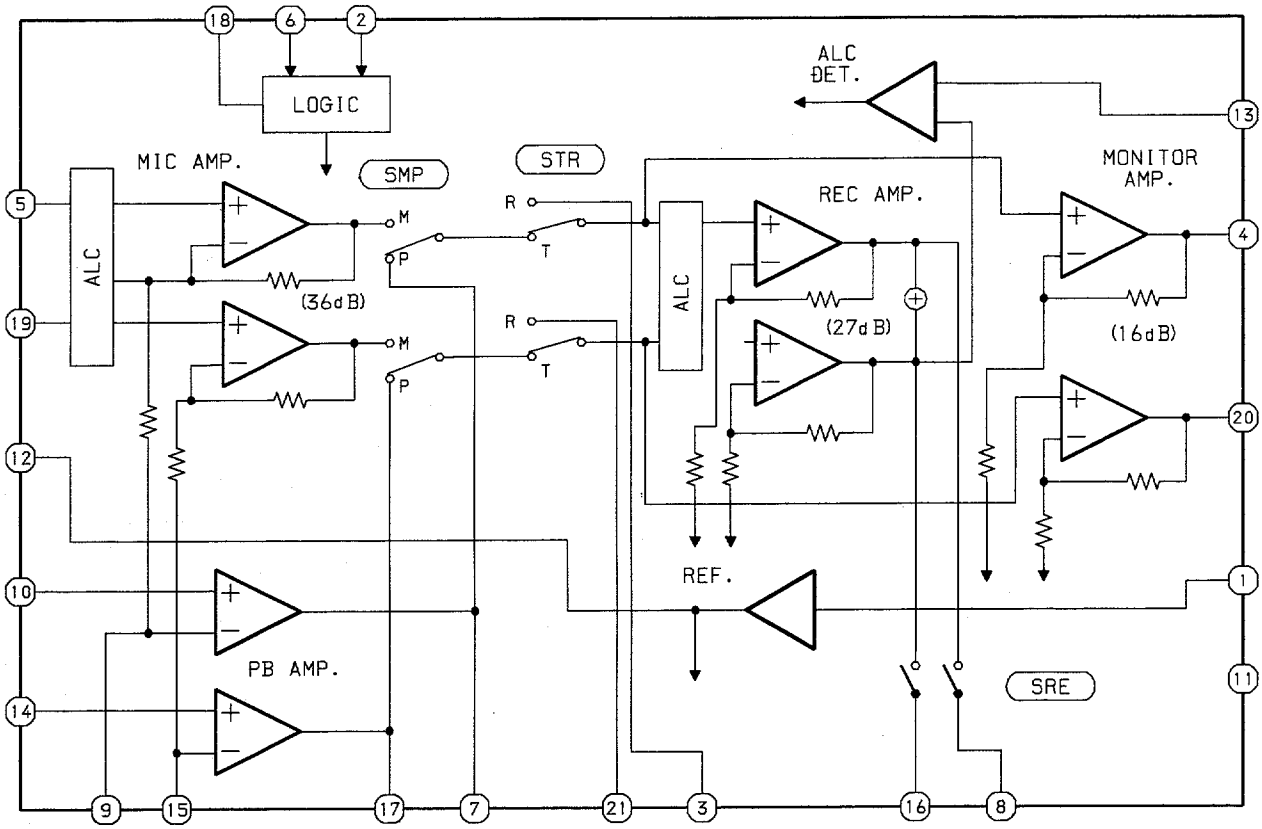

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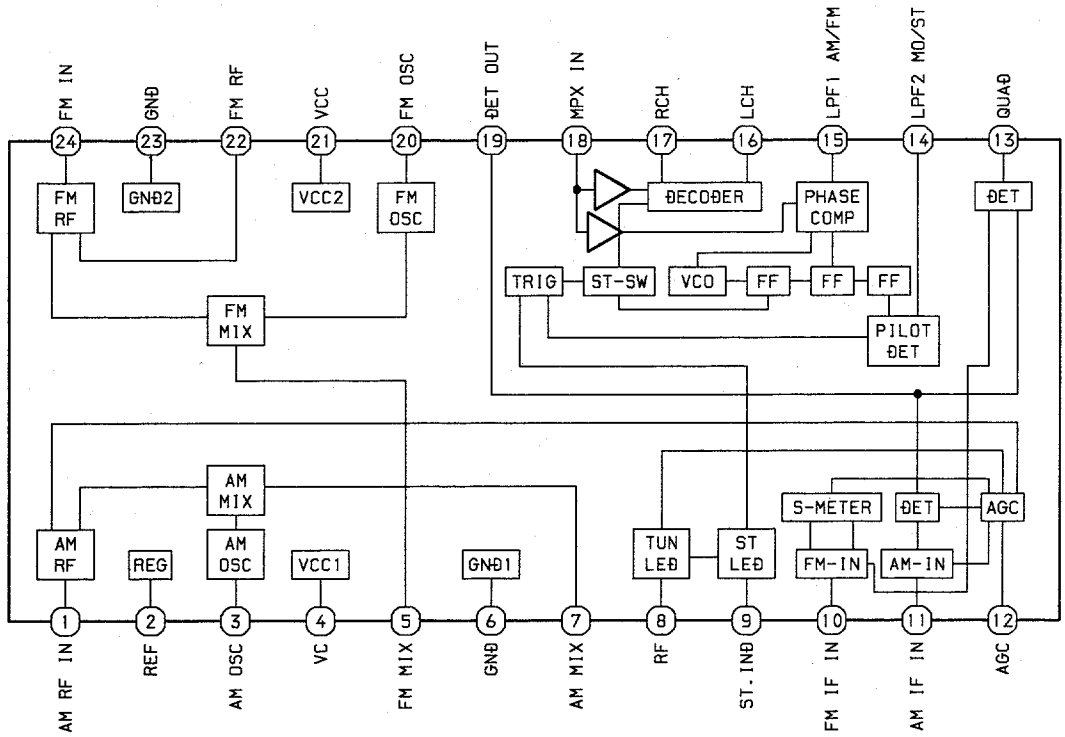
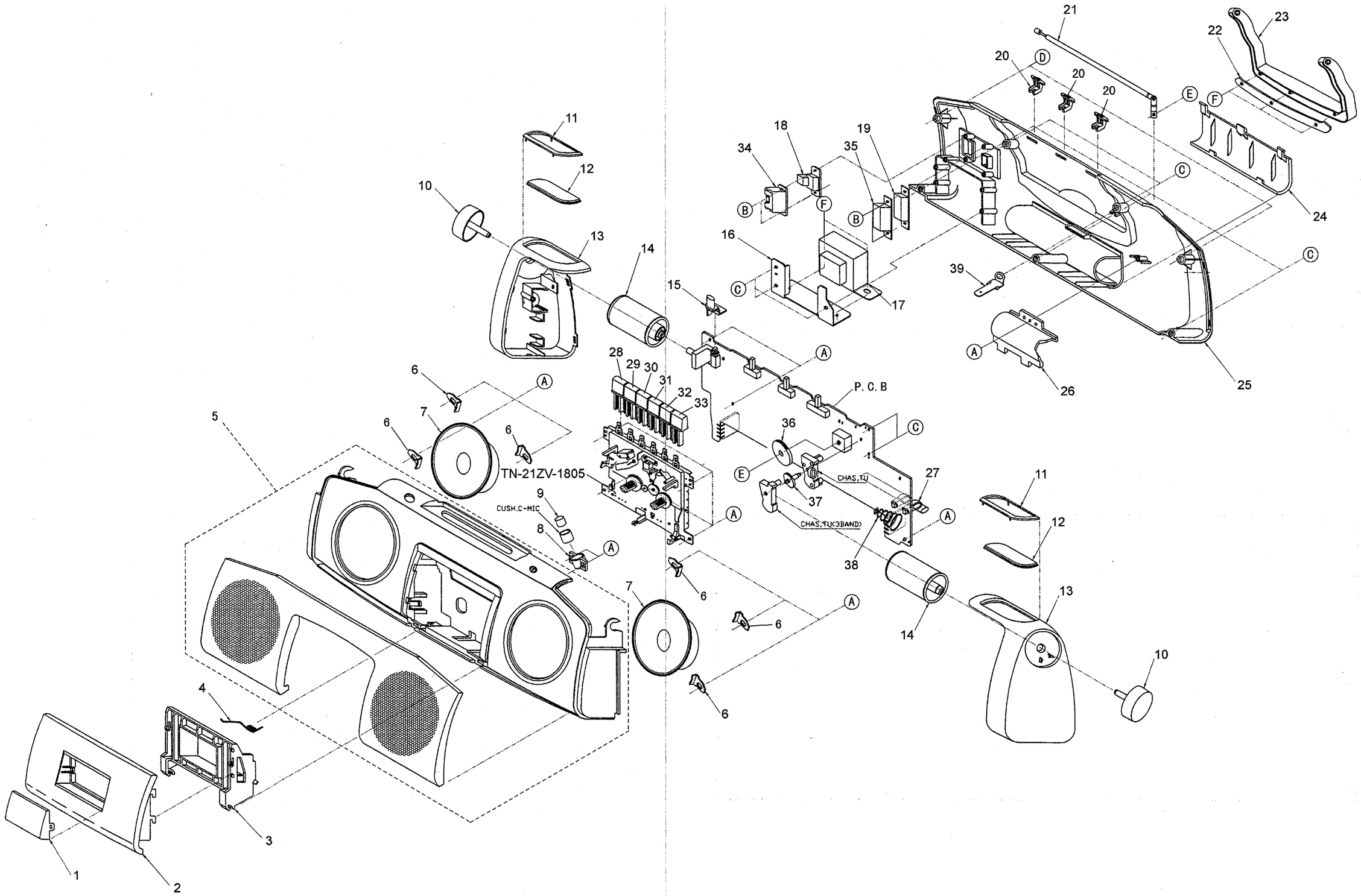


MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1/1

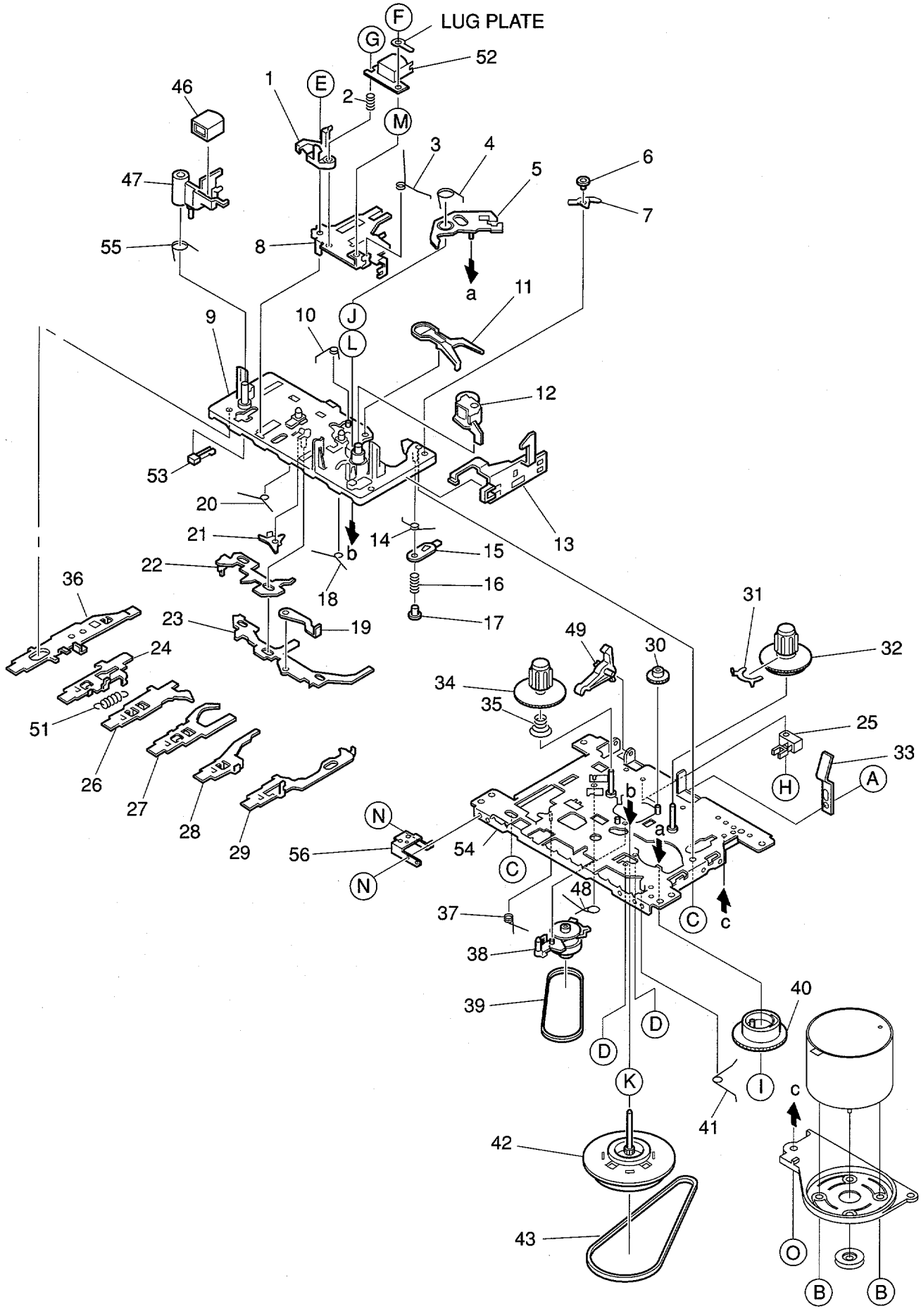
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-CS5-007-010		WINDOW,CASS
2	8Z-CS5-045-010		LID,CASS EZ<EZS>
2	8Z-CS5-111-010		LID,CASS EZ (BLUE)<EZL>
2	8Z-CS5-065-010		LID,CASS HR (BLACK)<HEJB>
2	8Z-CS5-095-010		LID,CASS HR (BLUE)<HRJL>
3	8Z-CS5-020-010		HLDR,CASS<EZS>
3	8Z-CS5-078-010		HLDR,CASS (BLACK)<HEJB>
3	8Z-CS5-108-010		HLDR,CASS (BLUE)<HRJL,EZL>
4	8Z-CS5-211-010		SPR,LID-CASS
5	SZ-CFC-P88-EZS		CABI,FR EZS(W/GRILLE)<EZS>
5	SZ-CFC-P88-HEB		CABI,FR HE(W/GRILLE)<HEJB>
5	SZ-CFC-P88-HRL		CABI,FR HR(W/GRILLE)<HRJL,EZL>
6	8Z-CS5-209-010		HLDR,SPKR
7	8Z-CS5-627-010		SPKR, 4OHM
8	8Z-CS5-206-010		HLDR,C-MIC
9	8Z-CSA-636-010		MIC, ECM.CMT-64
10	8Z-CS5-010-010		KNOB,RTRY VOL<EXCEPT HEJB>
10	8Z-CS5-068-010		KNOB,RTRY VOL (BLACK)<HEJB>
11	8Z-CS5-021-010		RING,TU-WINDOW
12	8Z-CS5-043-010		WINDOW,TUNING EZ<EZS,EZL>
12	8Z-CS5-029-010		WINDOW,TUNING HR<HEJB,HRJL>
13	8Z-CS5-027-010		CABI,SIDE (L) EX<EXCEPT HEJB>
13	8Z-CS5-028-010		CABI,SIDE (R) EX<EXCEPT HEJB>
13	8Z-CS5-063-010		CABI,SIDE-L EX (BLACK)<HEJB>
13	8Z-CS5-064-010		CABI,SIDE-R EX (BLACK)<HEJB>
14	8Z-CS5-202-010		DRUM,SCALE
15	8Z-CS5-017-010		KEY,Q-SOUND
16	8Z-CS5-208-010		HLDR,TRANS
⚠ 17	8Z-CS5-635-010		PT,EZ<EZS,EZL>
⚠ 17	8Z-CS5-636-010		PT,HR<HEJB,HRJL>
⚠ 18	8Z-CD9-635-010		JACK,AC E BLK W/SW
⚠ 19	87-A90-146-010		SW,SL 1-1-2<HEJB,HRJL>
20	8Z-CS5-018-010		KNOB,SL<EZS>
20	8Z-CS5-076-010		KNOB,SL (BLACK)<HEJB>
20	8Z-CS5-106-010		KNOB,SL (BLUE)<HRJL,EZL>
21	8Z-CS5-628-010		ANT,ROD
22	8Z-CS5-019-010		COVER, HANDLE<EZS>
22	8Z-CS5-077-010		COVER, HANDLE (BLACK)<HEJB>
22	8Z-CS5-107-010		COVER, HANDLE (BLUE)<HRJL,EZL>
23	8Z-CS5-009-010		HANDL,<EZS>
23	8Z-CS5-067-010		HANDL,(BLACK)<HEJB>
23	8Z-CS5-097-010		HANDL,(BLUE)<HRJL,EZL>
24	8Z-CS5-006-010		LID,BATT<EZS>
24	8Z-CS5-066-010		LID,BATT (BLACK)<HEJB>
24	8Z-CS5-096-010		LID,BATT (BLUE)<HRJL,EZL>
25	8Z-CS5-049-010		CABI,REAR EZ<EZS>
25	8Z-CS5-110-010		CABI,REAR EZ (BLUE)<EZL>
25	8Z-CS5-062-010		CABI,REAR HR (BLACK)<HEJB>
25	8Z-CS5-092-010		CABI,REAR HR (BLUE)<HRJL>
26	8Z-CS5-205-010		HLDR,BATT
27	8Z-CS5-207-010		HLDR,ANT
28	8Z-CS5-011-010		KEY,PAUSE
29	8Z-CS5-012-010		KEY,STOP
30	8Z-CS5-013-010		KEY,FF
31	8Z-CS5-014-010		KEY,REW
32	8Z-CS5-015-010		KEY,PLAY
33	8Z-CS5-016-010		KEY,REC
34	88-CD9-207-010		COVER, AC SOCKET
35	88-CD9-209-010		COVER, VOLTAGE<HEJB,HRJL>
36	8Z-CS5-216-010		DRUM,PULLEY (3BAND)
37	8Z-CS5-204-010		GEAR,TUNING
38	8Z-CS5-212-010		SPR,BATT
39	8Z-CS5-210-010		TERMINAL,ANT
A	87-741-095-410		UT2+3-8 GLD
B	87-651-075-410		VT1 +2.6-10
C	87-741-100-410		UT2+3-16(W/O) SLOT
D	87-741-103-410		UT2+3-25
E	87-251-072-410		U+2.6-5
F	87-721-094-410		QT2+3-6 GLD

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Sliver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

TAPE MECHANISM EXPLODED VIEW 1 / 1



TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	S1-921-030-4A0		HEAD BASE
2	S1-821-030-070		AZIMUTH SPRING
3	S1-921-030-090		PANEL P SPRING
4	S1-921-260-050		GEAR PLATE SPRING
5	S1-921-265-020		GEAR PLATE ASSY
6	S1-921-140-370		P ARM COLLER
7	S1-921-020-010		REC ARM
8	S1-921-030-110		HEAD PANEL
9	S1-921-143-160		BASE ASSY
10	S1-921-141-8A0		M CONTROL SPRING
11	S1-921-260-4A0		SENSING LEVER
12	S1-921-043-090		PINCH ROLLER ARM ASY
13	S1-921-130-010		EJECT SLIDE LEVER
14	S1-921-141-3A0		P CONTROL SPRING
15	S1-921-140-550		PAUSE LEVER(E)
16	S1-921-140-120		PAUSE LEVER SPRING
17	S1-921-140-110		PAUSE STOPPER
18	S1-921-140-150		BUTTON LEVER SPRING(B)
19	S1-821-011-590		E KICK LEVER
20	S1-921-140-140		BUTTON LEVER SPRING(A)
21	S1-921-140-200		PR STOPPER
22	S1-921-140-090		SWITCH ACTUATOR
23	S1-921-140-080		PUSH BUTTON ACTUATOR
24	S1-921-140-190		PLAY BUTTON LEVER
25	S6-401-010-380		LEAF SWITCH MSW-1275
26	S1-921-140-040		REW BUTTON LEVER
27	S1-921-140-050		FF,BUTTON REVER
28	S1-921-140-060		STOP BUTTON LEVER
29	S1-921-140-600		PAUSE BUTTON LEVER
30	S1-821-100-700		FF GEAR
31	S1-921-050-060		SENSOR
32	S1-921-053-100		TAKE UP REEL ASSY
33	S1-829-100-010		PACK SPRING
34	S1-921-050-150		S REEL HUB
35	S1-921-050-220		BACK TENSION SPRING
36	S1-921-140-030		REC BUTTON LEVER
37	S1-921-140-170		P.S.LEVER SPRING
38	S1-921-073-040		RF CLUTCH ASSY
39	S1-921-070-030		RF BELT
40	S1-921-260-020		CAM GEAR
41	S1-921-140-160		E ACTUATOR SPRING
42	S1-921-093-030		FLYWHEEL ASSY
43	S1-921-090-240		MAIN BELT
44	S1-921-120-010		MOTOR PULLEY
45	S6-002-010-120		MOTOR EG530AD-6F
46	S6-209-100-100		E HEAD PH-K380-MS1
47	S1-921-030-050		MG ARM
48	S1-921-140-210		REC BUTTON LEVER SPRING
49	S1-821-100-690		RECORD SAFETY LEVER
50	S1-921-120-080		MOTOR BRACKET
51	S1-821-010-500		PLAY BUTTON LEVER SPRING
52	S6-201-011-110		HEAD,RP7442ES-0951
53	S6-401-011-490		LEAF SW MSW-1541T
54	S1-921-015-010		CHASSIS ASSY
55	S1-921-030-100		MG ARM SPRING
A	S9-P33-200-320		DEL TITE SCREWM2-3
B	S1-921-120-020		MOTOR COLLER SCREW
C	S9-B10-200-510		P TAPPING BIND SCREW M2-5
D	S9-C07-204-510		SCREW,TAPPING(CAMERA)M2-4.5
E	S9-P01-200-610		SCREW,M2-6
F	S9-B01-200-310		(+)BIND SCREW M2-3
G	S9-F08-200-710		AZIMUTH SCREW M2-7
H	S9-P04-200-510		C TAPPING SCREW M2-5
I	S9-W02-300-100		P WASHER CUT 1.2-3.8-0.3
J	S9-W02-500-100		P WASHER CUT 1.45-3.8-0.5
K	S9-W01-400-100		P WASHER 2-3.5-0.4
L	S9-W01-130-200		P WASHER 2.1-4-0.13
M	S9-W13-000-100		Y WASHER PB 0.1T
N	S9-P04-200-410		C TAPPING SCREW M2-4
O	S1-921-120-030		MB SCREW

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

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